



October 6, 2015

Mr. Mark Lanigan
Regulatory Services
Island Regulatory and Appeals Commission
PO Box 577
501-134 Kent St
Charlottetown PE C1A 7L1

Dear Mr. Lanigan:

**2016 Capital Budget Filing Docket UE20724
Response to Supplemental Interrogatory - Mr. John te Raa**

Please find attached the Company's response to the Supplemental Interrogatory from Mr. John te Raa with respect to the 2016 Capital Budget Application. An electronic copy will follow.

Yours truly,

MARITIME ELECTRIC

A handwritten signature in black ink, appearing to be "J. Roberts", written over a horizontal line.

Jason Roberts
Director, Regulatory & Financial Planning

JCR67
Enclosure



Via email: johnteraa@gmail.com

October 6, 2015

Mr. John te Raa
1848 Hardy Mill Rd - Rte 220
York PE C0A 1P0

Dear Mr. te Raa:

**2016 Capital Budget Filing Docket UE20724
Response to Supplemental Interrogatory**

Please find attached the Company's response to your Supplemental Interrogatory with respect to the 2016 Capital Budget filing.

Yours truly,

MARITIME ELECTRIC

Jason C. Roberts
Director, Regulatory & Financial Planning

JCR68
Enclosure

1. **teRaa**

In response to the 2016 Capital budget filing I offer the following comments and observations.

CTGS expenditures:

In my interrogatories I posed the following questions.

Please provide a cost comparison as per table 4 (page 22) in the CT4 filing.

Specifically compare the life extension of the low pressure CTGS with a package T/G set such as the Tian 130 MPP.

Maritime Electric responded in part as follows “However the company still needs the CTGS to operate safely and reliably until the long term solution (installation of CT4) can be put in place”.

This is a new reason submitted for the need of CT4 and not consistent with the CT4 application.

The company goes on to say that the CTGS life extension option on Table 4 only applies to 10 MW of the low pressure section.

It is my view that the company is misrepresenting the facts by implying that the CT4 is the alternative to replacing the low pressure section of the CTGS .

The company did not answer my question.

1. **Response**

The demonstrated net capability of the Charlottetown Thermal Generating Station (CTGS) is 60 MW, made up approximately as follows:

- Two high pressure units, each with a capacity of 20 MW
- Three low pressure units with a combined capacity of 20 MW. The largest of the three low pressure units has a capacity of 10 MW and the two smallest low pressure units have a combined capacity of 10 MW.

The proposed capacity for CT4 is a nominal 50 MW, so it will replace 50 MW of the 60 MW of the CTGS capacity. This is the basis for one alternative to CT4 being a life extension refurbishment of the three largest CTGS units, for a refurbished CTGS capacity of 50 MW (20 MW + 20 MW + 10 MW).

It appears that Mr. teRaa’s question is what will replace the 10 MW of CTGS capacity provided by the two smallest low pressure units?

The two smallest low pressure units have not been considered for life extension due to their age (they are the oldest of the five units) and small size.

In the short term (i.e. the next two years, until CT4 is installed), there are expenditures that need to be made in order to keep the low pressure units operating safely and reliably until CT4 is installed. These expenditures are not for life extension. It is analogous to keeping an old car on the road.

In the medium term (i.e. the first several years following the installation of CT4), the low pressure units will be the first to be placed into long term layup, and the 10 MW provided by the two smallest low pressure units will be replaced with short term firm capacity purchases from NB Power.

In the longer term (i.e. beginning in 2020), Table 1 of Maritime Electric's Application to IRAC for approval of CT4 shows another capacity addition will be required in PEI or on the PEI side of Moncton, and the additional 50 MW shown in Table 1 for 2020 will be in part a replacement for the 10 MW provided by the two smallest low pressure units.

A Titan 130 combustion turbine is approximately one third the size of the proposed CT4, and the \$ / MW cost of the Titan 130 is about 20 % higher than that of a 50 MW combustion turbine, which reflects the economies of scale benefit of the larger unit. Thus, if a combustion turbine turns out to be the least cost option for providing the 50 MW shown for 2020, Maritime Electric expects that it would be in the form of one large unit rather than smaller units such as the Titan 130.